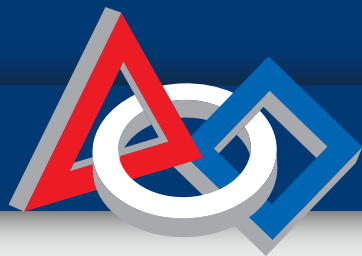


FRC

FIRST® Robotics Competition



FIRST® Robotics Competition: HOW TO START A TEAM

Resources

The FIRST website, www.usfirst.org, contains up-to-date information on the FRC season and links to helpful websites.

The FRC Team Handbook, available on www.usfirst.org, has more detailed information for team leaders.

Teams communicate with one another and with FIRST Mentors on the FIRST Forums at forums.usfirst.org.

Regional Directors and Senior Mentors are available to help your team connect with other teams in your area and find local sponsors.

Team Email blasts are sent to the Main Contact weekly during the season and are archived on the FIRST website.

FRC Blog contains information direct from the Director of FRC at frcdirector.blogspot.com.

Team support is available 8:30 AM - 5:00 PM EST from FRCteams@usfirst.org OR 1-800-871-8326 x0.

So you want to start a FIRST® Robotics Competition (FRC®) team and get involved in the excitement and challenge of promoting science and technology careers to today's high school students. Welcome to the most amazing program you'll ever lose sleep over. Your students will benefit from working side by side with professional engineers, gaining practical experience in construction, programming, and problem solving. FRC participants, as well as participants in FIRST K-12 robotics programs, use LabVIEW® graphical design software from NI, a tool used by professional engineers. Your Mentors will benefit from the opportunity to network with other engineers and educators from around the world. And everyone will have the hardest fun they ever had.

What do I need to get started?

- **2-3 professional engineers** – these Volunteers will guide your students through the engineering challenges inherent in the design and construction of a working robot.
- **2-3 additional adults** – these Volunteers will handle everything else: organization and communication with FIRST; registration; fund raising; shipping; and travel arrangements. As your team matures, you may want more adults to help with website design, community outreach, book keeping, animation, special projects, etc.
- **10 or more high-school-aged students** – as your team matures, you may find room for more students. More students will make it possible to participate in more aspects of the FIRST experience.
- **Financial Sponsors** – the 2015 registration fee, which includes the Kit of Parts when possible, and participation in at least one competition event, is \$5,000 for veteran



teams who reuse elements from prior year Kits of Parts when possible, and \$6,000 for rookie teams. Teams may register for additional events at \$4,000 each. Most teams budget funds to purchase additional materials for their robot, to transport team members and equipment to events, to create team t-shirts, etc.

- **A meeting place** – to design, build, program, and test a working robot, teams need access to a machine shop, enough room to practice the game challenge, and secure storage space.
- **Tools** – students will be designing and creating a working robot. You will need hand tools, power tools, and access to machine tools.
- **Time** – the minimum commitment would be to meet with your team several times a week from mid-December to the end of April. Many mature teams meet throughout the School year and some compete in off-season events during the summer.



FOR INSPIRATION AND RECOGNITION OF SCIENCE AND TECHNOLOGY **FIRST**

Season Overview

- **October** – Teams register in the Team Information Management System (TIMS) and choose which Kickoff and competition events they want to attend.
- **November/December** – Many teams hold strategy meetings; fundraise; hold trainings on building, programming, or other aspects of robot design; and plan for the upcoming season.
- **January** – Kickoff is the official beginning of the FRC season. At Kickoff, teams watch a broadcast of the release of the game rules, learn the password to decode the FRC Competition manual, and pick up their Kit of Parts. Teams have just six weeks to build a functioning robot to compete in the game.
- **February** – *FIRST* provides updates and email blasts throughout the build season to keep teams informed of important changes/improvements to the rules. On Stop Build Day, teams must stop work on their robot. Teams seal their robot into an isolation bag, and turn their attention to preparing for competition.
- **March** – Competitions begin. Teams travel to District or Regional competition events to compete in the game and be judged for awards in design, creativity, innovation, and culture changing behavior.
- **April** – Teams convene for the *FIRST* Championship

Lead Mentor Responsibilities

- Recruit lots of adult help. Appoint Volunteers to be the Main Contact, the Alternate Contact, and the Shipping Contact. Ensure the Main Contact understands they will be receiving weekly emails from *FIRST* containing vital information they must share immediately with the rest of the team.
- Register the team in TIMS, choose your Kickoff location (or arrange to pay for your Kit of Parts to be delivered to your site), and pick which competition event(s) your team will attend.
- Complete and submit a W-9 form.
- Recruit sponsors, fundraise, and apply for grants to ensure your team has enough funds to participate.
- Secure a meeting location where the team may design, build, program, test, and store a working robot.

- Obtain tools. You will need hand tools, power tools and access to machine tools.
- Schedule team meetings.
- Establish a team structure that encourages full participation by students.
- Attend a Local Kickoff if practical, or view the Kickoff broadcast with your team.
- Inventory your Kit of Parts within three days of receipt and notify FRCKit@usfirst.org of any discrepancies.
- Read and comply with all game rules outlined in the Competition Manual.
- Assist the team in setting objectives and developing timelines.
- Encourage creativity and Gracious Professionalism.®
- Monitor email blasts from *FIRST* and respond as needed.
- Check team updates twice weekly.
- Monitor team forums for live updates and mentorship opportunities.
- Ensure participant safety at all times.
- Ensure the team has a working robot by the deadline.
- Assign an adult to arrange transportation to competition events. If an event is far away, they may also need to arrange housing and meals.
- Attend competition events with your team.
- Manage funds and record expenses.
- Ensure required documents are submitted to *FIRST* as needed.



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WWW.USFIRST.ORG